UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,472	09/15/2003	Binod P. Gangadharan	188297/US	3749

66083 7590 04/08/2009

SUN MICROSYSTEMS, INC.
c/o Dorsey & Whitney LLP
370 SEVENTEENTH ST.
SUITE 4700
DENVER, CO 80202

EXAMINER	
HENRY, MARIEGEORGES A	

ART UNIT	PAPER NUMBER
2455	

MAIL DATE	DELIVERY MODE
04/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/663,472	GANGADHARAN ET AL.	
	Examiner	Art Unit	
	MARIE GEORGES HENRY	2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the application filed on 09/15/ 2003. Claims 1-31 are pending. Claims 1-31 are related to frameworks for integrating information systems.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Objections

3. Claims 1, 11, 18, 22, and 29 are objected because of the following informalities: The term 'can be" as stated in the claims has not been given patentable weight because it's not a positive limitation. Appropriated correction is required.

Claims 17, 19, and 20 are objected because of the following informalities: The term "is capable of" as stated in the claims has not been given patentable weight because it's not a positive limitation. Appropriated correction is required.

Claims 2-10, 12-16, 18-2, 23-28, and 31-32 are objected because of the following informalities: Dependent claims have to be preceded by the term "the" instead of the term –a-. Appropriated correction is required.

Claim 22 is objected because of the following informalities: a colon has to follow the terms "method comprising". Appropriated correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not described in a clear manner who is providing a generic connector interface, who is receiving information related to information system and where this information is received, who is generated the customized connector interface and where this customized connector is generated, and who is connecting information system to an application server. Appropriate clarification is needed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21 (2) of such treaty in the English language.

6. Claims 1-8, 17, and 19-31 are rejected under 35 U.S.C. 102(e) as being anticipated by **Starkovich** et al. (hereinafter "Starkovich") (**US 6,993,585 B1**).

Regarding claim 1, Starkovich discloses a method of connecting an application server to an information system, said information system having a first interface that can be used to access said information system, said method comprising:

providing a generic connector interface (Starkovich, column 7, lines 41-42, fig. 4, a generic gateway is disclosed);

receiving information related to said information system (Starkovich, column 6 , lines 34-39, fig. 1 a Distributed Transaction Processing is transmitting data and status information to a Transaction Gateway client);

generating a customized connector interface, by modifying said generic connector interface, based on said received information (Starkovich, column 8, lines 34-37, a custom Gateway provides a way for a customer to build customer own gateway to interface own applications); and

connecting said information system to said application server via said customized connector, wherein said customized connector provides access to said information system through said first interface of said information system (Starkovich, column 8, lines 38-47, fig.6, clients of a WebTx access enterprise applications using a processing information made of custom gateway).

Regarding claim 2, Starkovich discloses a method as recited in claim 1, in addition Starkovich discloses the method wherein said providing of a generic connector interface comprises providing a software package (Starkovich, column 8, lines 34-37 , Gateway

interface customer own application to an OLTP enterprise application).

Regarding claim 3, Starkovich discloses a method as recited in claim 2, in addition Starkovich discloses the method wherein said generic connector interface is provided as Resource Adaptor Archive (RAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available), and wherein said information system is a relational database that is compliant with a Java DataBase Connection (JDBC) architecture (Starkovich, column 7, lines 66-67 , class definitions used are JavaGate compatible) .

Regarding claim 4, Starkovich discloses a method as recited in claim 3, in addition Starkovich discloses the method wherein said generating of said customized connector interface comprises: adding said first interface to said Resource Adaptor Archive (RAR) file (Starkovich, column 8, lines 34-37, a custom gateway allows to build an application interface).

Regarding claim 5, Starkovich discloses a method as recited in claim 1, in addition Starkovich discloses the method wherein said providing of a generic connector interface comprises providing a Generic Resource Adaptor Archive (RAR) file (Starkovich, column 8, lines 28-29, a generalized java applet access feature is provided to build gateway).

Regarding claim 6, Starkovich discloses a method as recited in claim 1, in addition Starkovich discloses the method wherein said receiving of information related to said information system comprises: receiving one or more parameters (Starkovich, column 8, lines 38-39, key software component are part of the access relationship between a WebTx and enterprise applications).

Regarding claim 7, Starkovich discloses a method as recited in claim 6, in addition Starkovich discloses the method wherein said receiving of information related to said information system further comprises receiving said one or more parameters as input through a Graphical User Interface (GUI) (Starkovich, column 7, lines 44-47, data is received in a format that is understandable by a URL).

Regarding claim 8, Starkovich discloses a method as recited in claim 1, in addition Starkovich discloses the method wherein said providing of a generic connector interface comprises:

providing a software package(Starkovich, column 7 , lines 60-61 , Software Development Kit libraries are disclosed), and wherein said generating of a customized connector interface comprises: adding said first interface to said software package (Starkovich, column 8, lines 34-37, a custom Gateway provides a way for a customer to build own gateway to interface their own applications).

Regarding claim 17, Starkovich discloses in a component based computing environment, a connection interface for connecting an application component to an information system via an application server (Starkovich, column 8, lines 38-39, key software components are part of the access relationship between a WebTx and enterprise applications);

wherein said connection interface is capable of operating to connect said application server to a first information system via a first interface that can be used to access the first information system (Starkovich, column 8, lines 38-47, fig.6, clients of a WebTx access enterprise applications using a processing information made of custom gateway), and

wherein said connection interface is capable of operating to encapsulate said first interface of said first information system, thereby allowing said application server to establish a connection that connects the application component to said first information system (Starkovich, column 9, lines 34-36, a stub software component is part of a call procedure).

Regarding claim 19, Starkovich discloses a connection interface as recited in claim 17, in addition Starkovich discloses the system wherein the connector comprises a managed connection factory that is capable of: generating a connection factory (Starkovich, column 10 , lines 25-27 , a COM-based interface, using stub.dll

understands how to communicate over common interface); and managing a connection between said application component and said first information system (Starkovich, column 10 , lines 55-56, a buffer feature is servicing transaction request).

Regarding claim 20, Starkovich discloses a connection interface as recited in claim 17, in addition Starkovich discloses the system wherein said application server comprises a connection manager that is capable of interacting with said managed connection factory (Starkovich, column 9, lines 15-19, a request/response model acting as connection manager discloses is services Open/OLTP).

Regarding claim 21, Starkovich discloses a connection interface as recited in claim 17, in addition Starkovich discloses the system wherein said application server provides a container-based environment (Starkovich, column 7, lines 66-67 , class definitions used are JavaGate compatible), and

wherein said application server comprises one or more of the following components: a security service manager, a pool manager, and a transaction manager (Starkovich, column 9, lines 25-26, a transaction manager is disclosed).

Regarding claim 22, Starkovich discloses a method of connecting an application server to an information system, said information system having a first interface that can be used to access said information system, said method comprising

providing a Generic Resource Adaptor Archive (GRAR) file that can be configured to use said first interface to access said first information system (Starkovich, column 7, lines 60-67, the gateway built have a Java Libraries available);

opening said Generic Resource Adaptor Archive (GRAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for opening files);

adding said interface to said Generic Resource Adaptor Archive (GRAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for adding);

receiving one or more properties associated with said information system (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for receiving);

modifying said Generic Resource Adaptor Archive (GRAR) file, based on said one or more properties, to generate a Customized Resource Adaptor Archive (CRAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for modifying); and

using the Customized Resource Adaptor Archive (CRAR) file to connect said

application server to said first information system (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for connecting).

Regarding claim 23, Starkovich discloses a method as recited in claim 22, in addition Starkovich discloses the method wherein said method further comprises: deploying said Customized Resource Adaptor Archive (CRAR) using a deployment tool (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for adding).

Regarding claim 24, a method as recited in claim 23, in addition Starkovich discloses the method wherein said opening and modifying of said Generic Resource Adaptor Archive (GRAR) file comprises: using a graphical interface associated with a deployment tool to open or modify said Generic Resource Adaptor Archive (GRAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit having a framework, an GUI, for modifying).

Regarding claim 25, Starkovich discloses a method as recited in claim 21, in addition Starkovich discloses the method wherein said modifying of said Generic Resource Adaptor Archive (GRAR) file comprises: modifying a deployment descriptor (Starkovich, column , lines ,) (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for modifying).

Regarding claim 26, Starkovich discloses a method as recited in claim 22, in addition Starkovich discloses the method wherein said modifying of said Generic Resource Adaptor Archive (GRAR) file comprises: modifying a deployment descriptor (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available, using a software development kit for adding).

Regarding claim 27, Starkovich discloses a method as recited in claim 26, in addition Starkovich discloses the method wherein said modifying of said deployment descriptor comprises: editing an XML file, using a Graphical user interface (Starkovich, column 7 , lines 37-39, a interface having a monitor and HTML component, and Java applet is disclosed).

Regarding claim 28, Starkovich discloses a method as recited in claim 26, in addition Starkovich discloses the method wherein said modifying of deployment descriptor comprises: editing one or more of the following properties: a server Name, a port number, a user name, a password, a database name, a data source name, a description, a network protocol, a role name, a login timeout, driver properties, a delimiter, and a class name (Starkovich, column 7, lines 60-67, WebTx system having a Java Libraries available and using a software development is disclosed).

Regarding claim 29, Starkovich discloses a computer readable medium including computer program code for connecting an application server to an information system, said information system having a first interface that can be used to access said information system, said computer readable medium comprising:

computer program code for providing a generic connector interface (Starkovich, column 7, lines 41-42, fig. 4, a generic gateway is disclosed);

computer program code for receiving information related to said information system (Starkovich, column 6 , lines 34-39, fig. 1 a Distributed Transaction Processing is transmitting data and status information to a Transaction Gateway client);

computer program code for generating a customized connector interface, by modifying said generic connector interface, based on said received information (Starkovich, column 8, lines 34-37, a custom Gateway provides a way for a customer to build own gateway to interface their own applications); and

computer program code for connecting said information system to said application server via said customized connector, wherein said customized connector provides access to said information system through said first interface of said information system (Starkovich, column 8, lines 38-47, fig.6, clients of a WebTx access

enterprise applications using a processing information made of custom gateway).

Regarding claim 30, Starkovich discloses a computer readable medium as recited in claim 29, in addition Starkovich discloses the computer readable medium wherein said computer programming code for providing a generic connector interface comprises providing a software package (Starkovich, column 8, lines 34-37 , Gateway interface own application to an OLTP enterprise application is disclosed).

Regarding claim 31, Starkovich discloses a computer readable medium as recited in claim 30, in addition Starkovich discloses the computer readable medium wherein said generic connector interface is provided as Resource Adaptor Archive (RAR) file (Starkovich, column 7, lines 60-67, the gateway built has a Java Libraries available), and wherein said information system is a relational database is compliant with a Java DataBase Connection (JDBC) architecture (Starkovich, column 7, lines 66-67 , class definitions used are JavaGate compatible).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 9-14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Starkovich** in view of **Rostoker** et al. (hereinafter" Rostoker") (**US 6, 978,319 B1**).

Regarding claim 9, Starkovich discloses a method as recited in claim 1, wherein said connecting of said information system to said application server comprises:

Although Starkovich discloses a generic connector with two interfaces communicated, he does not disclose encapsulating said first interface by a second interface that is implemented after said generic connector interface is customized.

Rostoker discloses encapsulating said first interface by a second interface that is implemented after connector interface is customized (Rostoker, column 6, lines 37-47, fig. 6, a first interface is disclosed coupled with a second interface).

Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to incorporate Rostoker plug and play connection feature with Starkovich generic connection for integrating information method in order to

create generic connection for information method with a plug and play connection feature in order to permit a transparent translation between different communication protocols (Rostoker, column 7, lines 23-25).

Regarding claim 10, Starkovich discloses a method as recited in claim 1, wherein generating a customized connector interface comprises:

Although Starkovich discloses two interfaces communicated, he does not disclose generating a second interface that can encapsulate the first interface.

Rostoker discloses generating a second interface that can encapsulate the first interface (Rostoker, column 6, lines 37-47, fig. 6, a first interface is disclosed coupled with a second interface).

Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to incorporate Rostoker plug and play connection feature with Starkovich generic connection for integrating information method in order to create generic connection for information method with a plug and play connection feature in order to permit a transparent translation between different communication protocols (Rostoker, column 7, lines 23-25).

Regarding claim 11, Starkovich discloses In a component-based computing environment, a method of connecting an application component to an information systems via an application server, said information system having a first interface that can be used to access said information system, said method comprising:

making a first connection request, by said application component, for a connection to said information system (Starkovich, column 9, lines 29-31, a request is made to a transaction manager from a DCOM client via an adaptor), said connection request including an application component connection reference (Starkovich, column 9, lines 34-36, a stub software component is part of a call procedure);

passing the first connection request, by said resource adaptor, to said application server (Starkovich, column 9, lines 28-29, a request is to an Xgate using an adaptor);

making a second connection request, by said application sever, to generate a connection to said information system, wherein said second connection request includes an application server connection reference (Starkovich, column 9, lines 34-36, a call from a client's PC is remotely sent to a server application);

generating a connection based on said application server reference (Starkovich, column 9, lines 34-36, an interface call is made to a server application); and

connecting the application component to said information system via said connection (Starkovich, column 9, lines 34-36, a stub software component is part of a call procedure).

Although Starkovich discloses a generic connector with two interfaces communicated, he does not disclose receiving the first connection request by a second interface that can provide connection to said information system through said first interface.

Rostoker discloses receiving the first connection request by a second interface that can provide connection to said information system through said first interface.

Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to incorporate Rostoker plug and play connection feature with Starkovich generic connection for integrating information method in order to create generic connection for information method with a plug and play connection feature in order to permit a transparent translation between different communication protocols (Rostoker, column 7, lines 23-25).

Regarding claim 12, Starkovich discloses a method as recited in claim 11, in addition Starkovich discloses the method wherein said second interface is a resource adaptor that is compliant with a Java DataBase Connection (JDBC) architecture (Starkovich, column 7, lines 66-67, class definitions used are JavaGate compatible).

Regarding claim 13, Starkovich discloses a method as recited in claim 11, in addition Starkovich discloses the method wherein said method further comprises:

generating a managed connection factory for said second interface (Starkovich, column 10, lines 25-27, a COM-based interface, using stub.dll, understands how to communicate over common interface), and

wherein said managed connection factory operates to:

generate a connection factory (Starkovich, column 10 , lines 54-56, transfer is done according to Input view Definition format of an adaptor output); and manage said connection (Starkovich, column 10 , lines 55-56, a buffer feature is servicing transaction request).

Regarding claim 14, Starkovich discloses a method as recited in claim 13, in addition Starkovich discloses the method wherein said method further comprises:

providing a connection manager for said application server (Starkovich, column 8 , lines 64-67 , Open/OLTP Heritage Application Access component manage the access of a server); and

wherein said connection manager sends said second connection request to said managed connection factory (Starkovich, column 9, lines 15-19, a

request/response model acting as a connection manager disclosed is services Open/OLTP).

Regarding claim 16, Starkovich discloses a method as recited in claim 11, in addition Starkovich discloses the method wherein said information system is a relational database (Starkovich, column 8, lines 38-39, key software component are part of the access relationship between a WebTx and enterprise applications).

Regarding claim 18, Starkovich discloses a connection interface as recited in claim 17,

Although Starkovich discloses a generic connector with two interfaces communicated, he does not disclose the system wherein said connection interface is a configurable interface that can be configured to connect said application server to a second information system through a second interface which is different from the first interface.

Rostoker discloses the system wherein said connection interface is a configurable interface that can be configured to connect said application server to a second information system through a second interface which is different from the first interface (Rostoker, column 6, lines 37-47, fig. 6, a first interface is disclosed coupled with a second interface).

Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to incorporate Rostoker plug and play connection feature with Starkovich generic connection for integrating information systems in order to create generic connection for information systems with a plug and play connection feature in order to permit a transparent translation between different communication protocols (Rostoker, column 7, lines 23-25).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Starkovich,** in view of **Rostoker,** and further in view of **Theeten** (**US 6, 968,553 B1**).

Regarding claim 15, Starkovich discloses a method as recited in claim 14, wherein said method further comprises:

Although Starkovich and Starkovich disclose an application server and a transaction manager, they do not teach the method of providing a listener for said application server; wherein said listener informs said connection manager when said connection is generated.

Theeten discloses the method of providing a listener for said application server; wherein said listener informs said connection manager when said connection is generated (Theeten, column 21 , lines 63-65 , a polling cycle action as a manager is monitoring the responsiveness of a network element).

Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to incorporate Rostoker plug and play connection feature and Theeten connection monitoring feature with Starkovich generic connection for integrating information systems in order to create generic connection for information systems with a connection monitoring feature and a plug and play connection feature in order to permit a transparent translation between different communication protocols (Rostoker, column 7, lines 23-25) and to detect communication problem (Theeten, column 22, lines 5-6).

9. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure. Jeyaraman (US 7, 058, 950 B2) is made part of the record because of the teaching of monitoring network endpoints. Chapman (US 6, 088, 754) is made part of the record because of generic interface. Sylvain (US 6,118,777) is made part of the record because of the teaching of generic connectivity. Bimm (US 6, 901, 440) is made part of the record because of the teaching of universal service activity for any industry and independent technology.

Conclusion

10. Any inquiry concerning this communication from the examiner should be **directed to Marie Georges Henry whose telephone number is (571) 274-3226.** The examiner can normally be reached on Monday to Friday 7:30am - 4:00pm. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marie Georges Henry/

Examiner, Art Unit 2455

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2455